REMARKS

The Examiner is requested to approve the accompanying replacement drawings. The changes to the drawings are to change reference numeral 804 to 802 as suggested by the Examiner.

The Office Action and the reference cited therein have been carefully considered. Claims 1-54 are pending, remain pending in this application and are at issue herein.

The Examiner has objected to claim 7 due to a spelling error. The spelling error has been corrected. The Examiner is respectfully requested to remove this objection to claim 7.

The Examiner has rejected claims 1-8, 10, 12-15, 18, 19, 21, 22, 24-32, 36-39, 42-46, and 48-53 under 35 U.S.C. §102(b) as being anticipated by Ludwig et al. (U.S. Patent Application No. 6,237,025). The Applicant respectfully traverses this ground of rejection. Reconsideration of these rejections in view of the following comments is respectfully solicited.

With respect to claim 1, the Examiner states that col. 5, lines 20-27 and col. 4, lines 57-67 teach a multipoint processing module having at least one audio processor module and at least one video processor module and that col. 10, lines 48-60 teach exposing an interface by the multipoint processing module to receive a request from an application to command the multipoint processing module to modify its default operation to alter at least one attribute. Ludwig has been reviewed and it is respectfully submitted that col. 5, lines 20-27 and col. 4, lines 57-67 do not teach a multipoint processing module. As the present application states, multipoint processing modules, referred to as multipoint processing terminals (MPTs), provides mixing, switching, and other processing of media streams. Application Programming Interfaces (API's) defined for the MPT provide the application using the MPT the capability to change the default behavior of the MPT by allowing the application to control the routing audio and video streams in the MPT and control the media formats in a multipoint conference. Col. 5, lines 20-27 of Ludwig teach a system architecture that employs separate real-time and asynchronous networks for real-time audio/video and non real-time audio/video, text, graphics, and the like and col. 4, lines 57-67 of Ludwig teach real-time audio and/or video teleconferencing. Col. 10, lines 48-60 of Ludwig teach that the router/codec bank provides analog-to-digital conversion /compression of audio/video signals. The collaborate multimedia workstation (CMW) of Ludwig performs audio and video mixing and provides an audio processor and a video processor. The multimedia local area networks (MLANs) of Ludwig connect CMWs and provide audio/video/data networking for CMWs. Ludwig teaches that a MLAN server controls audio/video

switching circuitry, conference bridges, and a wide area network (WAN) gateway. The MLAN server has an audio video manager that controls A/V switching circuitry that allows a user to specify which connections should be switched. No teaching could be found in Ludwig to expose an interface by a component that provides mixing, switching, and other processing of media streams to allow a user to modify an attribute to change the default operation of the component. Furthermore, if the CMW and MLAN of Ludwig were to be combined to produce such a component, the modification would change the principle of operation of Ludwig (providing a significantly reduced networking cost by using existing hardware wherever possible), which is not allowed per MPEP §2143.01

Therefore, in view of the foregoing, the Applicant respectfully submits that claim 1 clearly distinguishes over the Ludwig reference. It is respectfully requested that the Examiner remove his § 102(b) rejection of claim 1 as being anticipated by Ludwig. Claims 2-8, 10, and 12 depend from claim 1 and are believed to be patentable for the same reasons set forth above for claim 1. With respect to claims 2-8 and 10, no teaching or suggestion could be found in Ludwig of commanding a multipoint processing module providing mixing, switching, and other processing of media streams to have an interface that exposes the commands claimed in claims 2-8 and 10. With respect to claim 12, no teaching or suggestion of a control flag could be found in Ludwig. Therefore, it is respectfully requested that the Examiner withdraw the rejections of claims 1-8, 10, and 12.

With respect to claims, 13-15, 18, and 19, the Examiner points to col. 10, lines 48-60 and states that Ludwig teaches exposing an interface by a media service provider component or a multipoint processing module to communicate commands and indications between the media service provider component and the multipoint processing unit. Col. 10, lines 48-60 of Ludwig teach that the router/codec bank provides conventional analog-to-digital conversion and compression of audio/video signals received from A/V switching circuitry and transmission and routing of data signals to/from a data LAN hub. The Examiner points to col. 21, lines 55-64 of Ludwig to state that Ludwig teaches an interface between a media service provider and a multipoint processing module that has a command to complete updating a video frame and display the video frame until commanded to release the video frame. The router/codec directs transmissions from an input to an output and compresses and decompresses signals. A router/codec bank does not providing mixing of media streams and therefore cannot be a multipoint processing module. If it is a media service provider, it must interface with user applications. No teaching or suggestion of the router/codec interfacing with a user could be found. Furthermore, col. 21, lines 55-64 teach a function of a CMW. As taught by Ludwig, the CMW does not interface with the

router/codec. Since the CMW does not interface with the router/codec, then the router/codec cannot be either of the media service provider or the multipoint processing module of claim 13. Modifying Ludwig to interface with the router/codec would change the principle operation of Ludwig, which as stated above is not allowed per MPEP §2143.01. Therefore, Ludwig does not teach or suggest one of a media service provider or a multipoint processing module having all of the elements of claims 13-15, 18, and 19. Therefore, Ludwig does not anticipate or make obvious what is claimed in claims 13-15, 18, and 19. It is therefore respectfully requested that the Examiner withdraw the rejection of claims 13-15, 18, and 19.

With respect to claims 21, 22, 24-32, and 36-39, the present application defines a multipoint processing accelerator, which is an apparatus that provides hardware accelerated implementations of multipoint processing module functionality. Additionally, a minidriver is a hardware-specific driver that provides only device-specific controls and it uses a class driver to accomplish most actions through function calls. Ludwig has been thoroughly reviewed and no teaching or suggestion could be found of a hardware specific driver or of a hardware accelerator. With respect to claim 25, col. 37 of Ludwig teaches an Expert deferring a telephone call for X minutes, putting a call on hold because an urgent priority request has been received and resuming the call. Col. 40, lines 49-56 teach an expert switching from one mode to another mode so that the expert will not be disturbed. A periodicity of an interrupt service routine is the recurrence (e.g., cycle time) of the interrupt service routine. No teaching or suggestion of a periodicity could be found. The Examiner also points to col. 32, lines 41-64 and col. 16, lines 32-28 of Ludwig and states that this shows setting/getting a time to evaluate whether a speaker is continuing to talk. Col. 32, lines 41-64 of Ludwig teach compression/decompression engines and alternative delivery strategies depending on if compression is needed. Col. 16, lines 32-38 of Ludwig teach a telephone interface integrated into an add-on box and a hold switch and audio mute switch that could be added to the add-on box. Compression/decompression of audio/video does not teach or suggest setting/getting a time to evaluate whether a speaker is continuing to talk. Nor does a hold switch or audio mute switch teach or suggest setting/getting a time to evaluate whether a speaker is continuing to talk. No teaching or suggestion could be found of setting/getting a time to evaluate whether a speaker is continuing to talk. With respect to claim 37, the Examiner points to col. 32, lines 12-30 of Ludwig and states that Ludwig teaches specifying an upper limit in bandwidth transmission to a video output pin and supplying the upper limit bandwidth transmission of the video output pin to a media service provider. It is respectfully submitted that Ludwig teaches that the bandwidth for transfer of

files among disks is ultimately limited by the bandwidth of the intra-chassis and inter-chassis networking. Ludwig has been thoroughly reviewed and no teaching or suggestion of a video output pin or specifying an upper limit to a video output pin could be found. With respect to claim 39, col. 18, lines 19-33 of Ludwig teach how a CMW could be created using an add-on box in conjunction with other components. No teaching or suggestion of a video frame's average display time could be found in Ludwig.

Therefore, for the reasons set forth above, it is respectfully requested that the Examiner withdraw the rejection of claims 21, 22, 24-32, and 36-39.

With respect to claims 42-46 and 48-53, the Examiner states that col. 37, lines 1-65 of Ludwig teach creating at least one multicast bridging terminal. As defined in the instant specification, a multicast bridging terminal is used to bridge a client using one type of control signaling and media streaming to a conference that is using different types of control signaling and media streaming. Col. 37, lines 1-65 of Ludwig teach an expert deferring a telephone call for X minutes, putting a videoconference call on hold because an urgent priority request has been received, connecting to the urgent priority videoconference call and resuming the first videoconference call after the urgent priority call is finished. This teaches switching between videoconference calls. No teaching or suggestion could be found of bridging a client using one type of control signaling and media streaming to a conference that is using different types of control signaling and media streaming. With respect to claim 46, no teaching or suggestion of a data format being PCM linear could be found in Ludwig. With respect to claim 52, no teaching or suggestion of a silence period in the input stream could be found or adjusting a clock by the length of time of the silence period. With respect to claim 53, col. 32, line 31 to col. 33, line 20 of Ludwig teaches compression and decompression of an audio/video file. There is no teaching or suggestion that the size of the data frames of the compressed and decompressed files are of different sizes. No teaching or suggestion could be found of transforming data frames of a first size into data frames of a second size.

Therefore, for the reasons set forth above, it is respectfully requested that the Examiner withdraw the rejection of claims 42-46 and 48-53.

The Examiner has rejected claims 9, 11, and 23 under 35 U.S.C. § 103 as being unpatentable over Ludwig in view of Roy (U.S. Patent No. 6,600,725). The Applicants respectfully traverse this ground of rejection. Reconsideration of these rejections in view of the following comments is respectfully solicited.

To establish *prima facie* obviousness, all the claim limitations must be taught or suggested by the prior art. Claims 9 and 11 depend from claim 1 and are believed to be

patentable for the same reasons set forth with respect to claim 1. Claim 23 depends from claim 21 and is believed to be patentable for the same reasons set forth above for claim 21. Furthermore, the Examiner states that col. 16, lines 32-38 and col. 17, lines 36-44 of Ludwig teach enabling and disabling automatic gain control. Col. 16, lines 32-38 of Ludwig teach a handset/headset jack, a telephone interface integrated into an add-on box and a hold switch and audio mute switch that could be added to the add-on box. Col. 17, lines 36-44 teach that outgoing audio signals pass through standard preamplifier and equalization circuitry where the desired signal is selected by standard switch circuitry. No teaching or suggestion of automatic gain control could be found in Ludwig or in Roy. Furthermore, as previously indicated, no teaching or suggestion could be found of specifying a periodicity of an interrupt service routine in Ludwig and no teaching or suggestion of specifying a periodicity of an interrupt service routine could be found in Roy. Therefore all of the claim limitations of claim 9 or 23 are not taught or suggested, singly or in combination, by Ludwig or Roy.

With respect to claim 11, a fast update is used to signal a device to send a new frame or group of blocks or macroblocks at the device's earliest convenience to compensate for the image quality degradation due to packet loss or when source switching occurs in multipoint applications. Col. 37, lines 44-54 of Ludwig teach that a user can add additional callers to a conference. No teaching or suggestion in Ludwig or Roy, singly or in combination could be found of a fast update request. Therefore all of the claim limitations of claim 11 are not taught or suggested, singly or in combination, by Ludwig or Roy.

Therefore, for the reasons set forth above, it is respectfully requested that the Examiner withdraw the rejection of claims 9-11 and 23.

The Examiner has rejected claims 16, 17, and 33-35 under 35 U.S.C. § 103 as being unpatentable over Ludwig in view of Salesky (U.S. Patent No. 6,343,313). The Applicants respectfully traverse this ground of rejection. Reconsideration of these rejections in view of the following comments is respectfully solicited.

Claims 16 and 17 depend from claim 13 and are believed to be patentable for the same reasons set forth above for claim 13. Claims 33-35 depend from claim 21 and are believed to be patentable for the same reasons set forth above for claim 21. With respect to claims 16 and 33, as previously indicated, a fast update is used to signal a device to send a new frame or group of blocks or macroblocks at the device's earliest convenience to compensate for the image quality degradation due to packet loss or when source switching occurs in multipoint applications. Salesky teaches that updates for a capture

rectangle may be requested by a server or sent at fixed or variable times announced by a presenter client or sent at the command of a presenter. A presenter is the party in a conference who is presenting information. Salesky and Ludwig have been reviewed and no teaching or suggestion could be found, singly or in combination, of a fast update or commands to perform a fast update of a group of blocks or of macroblocks.

With respect to claims 17 and 34-35, a channel packet rate loss is the rate at which packets in a channel are lost. Col. 20, line 63 to col. 21, line 14 teaches that a filter will discard blocks if a client in not able to process each block. It is respectfully submitted that a discarded packet is not a lost packet. The loss described in Salesky is the loss in frame rate, not a loss of packets. No teaching of suggestion could be found in Salesky or Ludwig, singly or in combination, of a channel packet rate loss.

Therefore, all of the claim limitations of claims 16, 17 and 33-35 are not taught or suggested, singly or in combination, by Ludwig or Salesky. Therefore, for the reasons set forth above, it is respectfully requested that the Examiner withdraw the rejection of claims 16, 17, and 33-35.

The Examiner has rejected claims 20, 40, 41, 47 and 54 under 35 U.S.C. § 103 as being unpatentable over Ludwig in view of Falco (U.S. Patent No. 6,606,112). The Applicants respectfully traverse this ground of rejection. Reconsideration of these rejections in view of the following comments is respectfully solicited.

Claim 20 depends from claim 13 and is believed to be patentable for the same reasons set forth above for claim 13. Claims 40 and 41 depend from claim 21 and are believed to be patentable for the same reasons set forth above for claim 21. Claims 47 and 54 depend from claim 42 and are believed to be patentable for the same reasons set forth above for claim 42. With respect to these claims, the Examiner states that Ludwig does not teach the RTP packet limitations and that Falco teaches all of the RTP packet claim elements and refers to col. 3, lines 13-65 of Falco. Falco has been reviewed and Falco teaches RTP header information. However, no teaching or suggestion of retrieving or setting values of a minimum value, a maximum value, a default value and a support value of the maximum RTP packet size could be found. No teaching or suggestion could be found of monitoring RTP packets for a parameter change.

Therefore, all of the claim limitations of claims 20, 40, 41, 47 and 54 are not taught or suggested, singly or in combination, by Ludwig or Falco. Therefore, for the reasons set forth above, it is respectfully requested that the Examiner withdraw the rejection of claims 20, 40, 41, 47 and 54.

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

Kevin L. Wingate, Reg. No. 38662
LEYDIG, VOIT & MAYER, LTD.
6815 Weaver Road, Suite 300
Rockford, Illinois 61114-8018
(815) 963-7661 (telephone)
(815) 963-7664 (facsimile)

Date: February 6, 2004

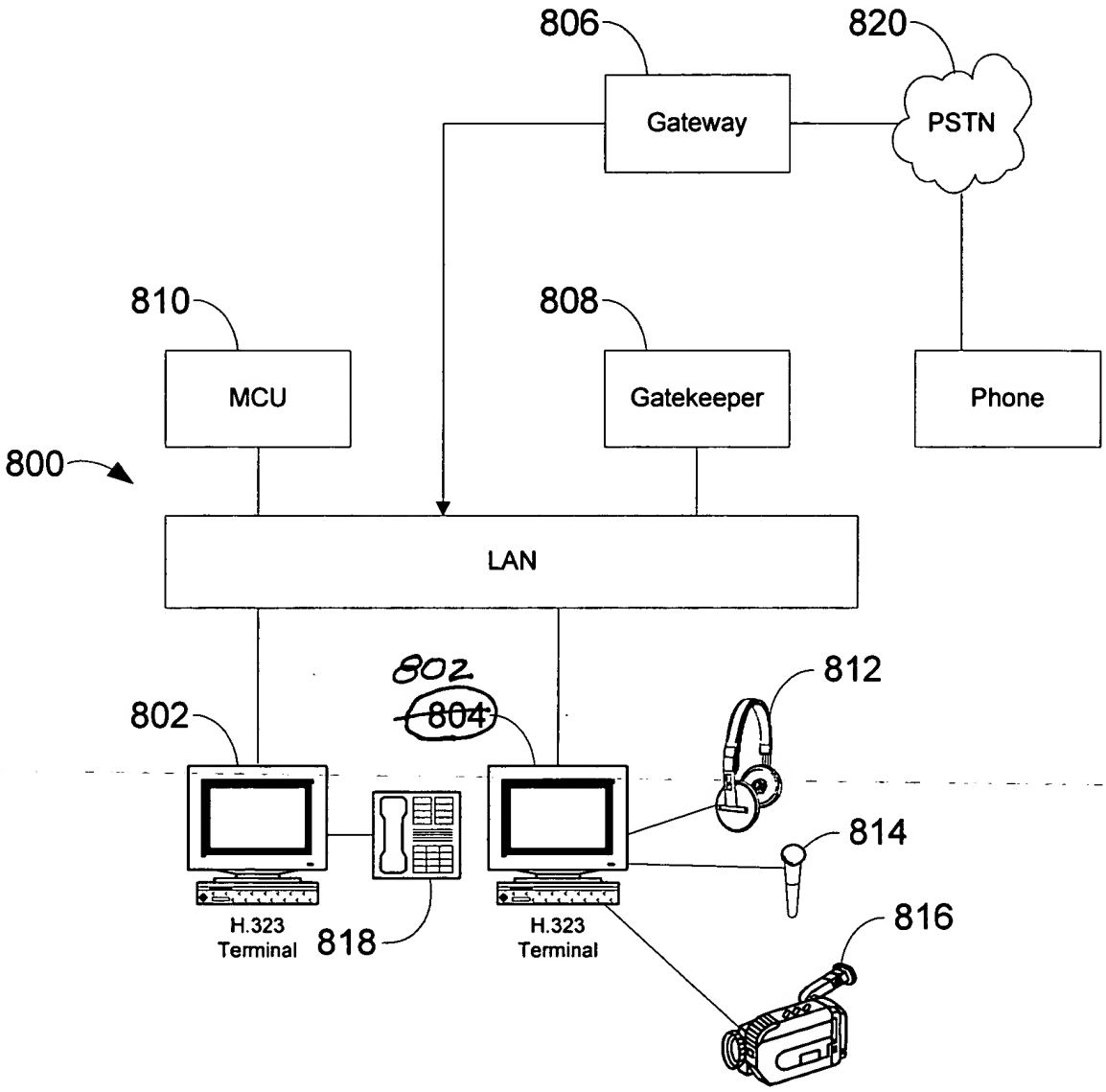

FIG. 13